RUTGERS

Department of Library & Information Science
School of Communication & Information
Rutgers, The State University of New Jersey
4 Huntington Street   848-932-7500
New Brunswick, NJ 08901-1071   Fax: 732-932-6916

PRESENTERS:

Lilia Pavlovsky, PhD: Director, Master of Information Program; Associate Teaching Professor

Sharon Stoerger, PhD: Director, Information Technology & Informatics Program; Assistant Teaching Professor

TITLE: Expanding an iSchool Curriculum for Diverse Information & Technology Workplaces: The Rutgers Master of Information Program Experience

ABSTRACT: The presenters will discuss the evolution of the Master of Information Program in the School of Communication & Information at Rutgers as a response to shifts in workplace demands and the educational needs of a growing Information Technology & Informatics (ITI) undergraduate community. The resulting program grounds technological expertise in a wider context of social impact, service, design, management, and user needs. This presentation addresses the challenges and opportunities faced in this process of program change.

TOPICS: (select from list) education in library and information sciences

KEYWORDS: education, pedagogy, curricular redesign, technology

Best practice: Participatory design and Program/curriculum change

Description of Activity:
The focal point of this presentation is the analysis and reorganization of a program curriculum that leveraged the more traditional Master of Library and Information Science (MLIS) curriculum into a program portfolio that addresses the needs of a multifaceted community of learners whose key interest is the study of information as it applies to a variety of contexts as identified in our new Master of Information (MI) program. The "best practice" discussed here will address a participatory design approach to program and curricular development and change that resulted from a commitment to cultivating strong communication channels between faculty, administration, stakeholders and students that had visible impact on decision making.

The problem:
Declining enrollment, outdated curriculum, technological change and changing workplace economies were challenges faced by Rutgers' Library and Information Science program. In November 2013 the leadership of the School of Communication & Information and the Department of Library and Information Science (LIS) convened a taskforce with a charge to formally identify opportunities, weaknesses, vulnerabilities and market demands that would inform our decision making regarding program change and development.

In April 2014, the taskforce submitted a final report with recommendations based on the discovery process. A key factor influencing our decision-making was the rapidly growing undergraduate component of the LIS department - the Information Technology and Informatics program (ITI) - which included approximately 500 students at that time. Many of these undergraduate students found the parameters of an MLIS degree limiting to their career goals in

that they did not want to be constrained to LIS contexts. Another factor was an increasing number of LIS students in the master's program (MLIS) whose career paths diverged into information work that demanded greater technical expertise, along with a deeper understanding of traditional LIS educational content areas such as classification, cataloging, metadata, etc.

With respect to program design, there were two options:

1. Develop new degree programs for new areas and maintain MLIS as separate degree structure; or
2. Maintain one degree structure and build out independent but interrelated communities within that platform to sustain a unified program and faculty.

It was determined that the optimal choice for our program evolution was the second option and the taskforce recommended the following:

> *After reviewing a variety of possibilities, the taskforce recommends that the program name be changed to: "Master of Information" because it is broad enough to encompass a variety of specializations and enables easier labeling for students.*

Rather than create programmatic silos, the faculty decision to create a wider, more inclusive framework for our curriculum facilitated the development of various, strategically defined arenas for concentration within the program. The potential for collaboration across areas of expertise was also a priority. Furthermore, a broader degree title (MI) provided the opportunity for greater flexibility in terms of future program development, particularly with respect to subject concentrations. The faculty voted to move forward with the recommendation in April, 2014. Approval for this program transformation was finalized in August 2014 with approvals from the Chancellor (April, 2014), the Institutional Research Committee (July 2014), and the State of New Jersey (August 2014).

From Concept to Design:
At the point of final approval, the process of framing out an infrastructure for curriculum and program identity commenced. It is one thing to call oneself a Master of Information Program or an "MI Program" but a very different thing to explore what that label actually means when grounded in the reality of curriculum, faculty expertise, market demands and student goals. This part of the presentation will focus on how a "grounded theory" approach to curricular reorganization and development was enacted in the practice of the decision making structure of our curriculum committee and faculty. We will also discuss the necessity of integrating stakeholder voices and goal into a participatory design process.

The stakeholder community was a complex entity where individual and group identity needed to be clarified and understood. These included, but are not limited to: Library Science researchers and practitioners; Alumni; LIS organizations; American Library Association Standards; New Jersey State Library associations; undergraduate ITI students and their goals; retired faculty; graduate student (future/prospective); faculty; and the School of Communication & Information community at large. Most importantly the foundation of this reorganization was deeply grounded in the curriculum of the MLIS program. We wanted to build on those strengths and provide pathways for students interested in any and all areas of LIS, while at the same time, create pathways into program areas not bounded by the context of Library service. Another goal was to leverage the skill sets commonly associated with library science into other areas of application.

The approach to this program and curricular redesign process needed to acknowledge and reconcile priorities that were often somewhat diametrically opposed. Some examples include:
- Preparing students to meet demands of a diverse and technologically driven marketplace versus what faculty perceived to be of value with respect to academic knowledge of subject matter;
- Preserving a strong, library focused curriculum, while moving outward towards a curriculum that integrates information technology (IT) education;
- Maintaining the appropriate balance between human centered values and technological demands;
- Leveraging and maintaining the strengths of the more traditional MLIS program education as the 'anchor store' of the program while carving out areas into which the program could expand;
- Continuing to support existing strong relationships with traditional stakeholder communities while seeking new communities; and
- Upholding the core values of librarianship while incorporating a diverse, ITI oriented community).

To transform these and other issues associated with MLIS program into a MI curricular structure that maintains the totality of a program and faculty areas of expertise was a major challenge. The MI program that was developed through this process is designed around the following concentrations:

- Library and Information Science (including School Library specialization)
- Data Science
- Technology Information & Management
- Informatics & Design
- Archives & Preservation
- Students can also create their own pathways once they fulfill foundational and technological requirements.

The end result, in terms of design, was the creation of a flexible and dynamic educational environment that facilitated growth of expertise within curricular concentrations while, at the same time, providing opportunities for interaction among students and faculty with diverse academic backgrounds and professional goals. The premise here was that expertise is critical in today's market but when problems are being addressed, individuals with different types of expertise are brought to that table to make decisions. Our concentrations represent areas of expertise, but our program is a place where students can solve problems in at a "table" where multiple curricular perspectives could be present.

After this restructuring was completed what we learned, among many other things, was that our curriculum already supported these areas of expertise. The curriculum essentially remained the same. Some courses were renamed, a few were deleted, many were updated and a few new courses were added. In general, this was more about reorganizing our intellectual assets more than it was about creating a new program from scratch. Many of the goals and priorities already existed in our program and curriculum and simply needed to be brought to the foreground.

From Design to Action:
Although Fall 2015 was the "official" start of the MI program, Fall 2016 really marks the first cycle of the program roll out. The design of the new program and curriculum structure is now

being experienced in action. The instantiation of design in practice has illuminated the strengths and the weaknesses of our endeavor. What became clear almost immediately was that what we were most concerned about was not an issue in practice. For instance, we thought that building the story of MI would take much longer to penetrate the prospective and current student market and thus expected enrollment to be relatively low. Instead we found ourselves with a 146% increase over 2015.

We also expected that the undergraduate ITI students would not apply to the program and that the 4+1 (5 year Master's opportunity) would be slow to start up. In both cases our assumptions were incorrect. We also faced challenges related to marketing the program and establishing a new public identity. A large portion time related to reorganization was dedicated to constructing a narrative that explained the dynamics of this program. We were also concerned that the LIS community would be skeptical of our change, but instead we found ourselves with more LIS focused students than in previous years.

The key factors that enabled this project to move forward quickly were:
- A strong formal and informal communication with faculty, stakeholders and administration that ultimately led to a participatory program design model;
- An understanding of the need to leverage our assets (such as the MLIS program and our undergraduate ITI program expertise/needs); and
- The maintenance required for an ongoing, iterative model of design to avoid curricular stagnation.

The program continues to be a work in progress but the next steps for its evolution are already present on the horizon. It has become quite clear that curriculum and program assets do not stand still when the marketplace is a never-ending structure of change. Open communication, participatory design processes and doing what is best for our students and stakeholders are the values that continue to guide our future action.